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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/400,233 09/21/99 KAADEN

J RCA89796

EXAMINER

WM02/0911

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THOMSON MULTIMEDIA  
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PRINCETON NJ 08543-0028

WONG, K

ART UNIT

PAPER NUMBER

2651

DATE MAILED:

09/11/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
09/400,233

Applicant(s)  
Kaaden et al

Examiner  
K. Wong

Art Unit  
2651



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1) ☒ Responsive to communication(s) filed on Jan 11, 2001

2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

4) ☒ Claim(s) 1-10 is/are pending in the application.

4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 1-10 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☒ All b) ☐ Some\* c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)

19) ☐ Notice of Informal Patent Application (PTO-152)

17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3 & 4

20) ☐ Other:

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## DETAILED ACTION

### *Specification*

1. The abstract of the disclosure is objected to because of the context of lines 17-20 of the abstract are not clear. Furthermore, these lines seem to be missing or part of a incomplete thought. Correction is required. See MPEP § 608.01(b).
2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 250 words. It is important that the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### *Claim Rejections - 35 USC § 112*

3. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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On line 2 of the claim, the phrase "control signal is emitted to" is not clear because the context of this phrase. The examiner has interpreted this phrase as the "control signal is outputted to" for this office action.

*Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims (1-10) are rejected under 35 U.S.C. 103(a) as being unpatentable over Pahr in view of Seo et al.

Regarding claim 1: Pahr discloses the procedure for head tracking control with data medium that including steps:

the data tracks are arranged at least in sections essentially parallel (see figure 17 of Pahr) to the relative movement direction between the data medium and the head unit (see figure 1 of Pahr), in which case the data tracks are split into successive data sections which, for their part, are each divided into an initial region (beginning of data marks region) and a useful region (data region), characterized in that the procedure steps further including:

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a) while a data section is moving past the head unit, primary measured values are determined from at least one control track (see col. 10, lines 11-68 of Pahr);

b) while the initial region of a data section is moving past the head unit, secondary measured values are determined from at least one additional control track (see col 20, lines 61-64 of Pahr);

c) a tracking signal is derived, based on the primary and secondary measured values (see col. 20, lines 42-67 of Pahr), and

d) a tracking control signal is produced from the tracking signal (see col. 20, line 42 to col. 21, line 4). Thus, the limitations of the claim are considered met.

Although Pahr discloses the limitations of the claim, Pahr is silent on the capability of the data track format that including the initial region. Seo et al is relied on for the teachings of the initial region (servo burst section) (see col. 4, lines 28-52 of Seo et al).

It would have been obvious to one ordinary skill in the art at the time of the invention was made to modify the tape format with the data block format as taught by Seo et al. The rationale is as follows: one ordinary skill in the art would have been motivated to provide a proper alignment of the head and the track as suggested in col. 3, lines 10-26 of Seo et al.

Regarding claim 2: the limitations of the tracking control signal is emitted to at least one actuator by means of which the position of the regions which can be addressed by the head unit on the data medium is varied are considered met because Pahr describes the noted functions in col. 15, line 47 to col. 16, line 12.

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Regarding claim 3: the limitations of a first tracking signal is first of all determined from the primary measured values; a second tracking signal is then determined from both the primary measured values and the secondary measured values, after which a difference value is formed from the first and the second tracking signal and is stored, and during this time interval, the tracking control signal is produced solely from the second tracking signal are considered met because Pahr describes a similar function as the noted functions in col. 20, lines 42-60.

Regarding claim 4: the limitations of the first tracking signal is determined from the primary measured values, and during this time interval, the tracking control signal is produced from the first tracking signal as well as the stored difference value are considered met because Pahr describes a similar function as the noted functions in col. 20, lines 42-53.

Regarding claim 5: Pahr discloses a recording procedure for recording data on a data medium in the form of tape which including steps:

a) a write head (see elements 14 and 16 in figure 1 and col.5, lines 46-50 of Pahr) is used to record a plurality of data tracks on the data medium at the same time, in which case the data tracks are split into successive data sections which, for their part, are each divided into an initial region (begin of data marks region) and a useful region (data region), and at least one of the data tracks is used as a primary control track for tracking control of the write head or of a head unit (see col. 20, lines 42-67 of Pahr),

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b) furthermore, at least one secondary control track is recorded in the initial region of each data section (see col. 20, lines 54-67 of Pahr). Thus, the limitations of the claim are considered met.

However, Pahr is silent on the initial region which does not extend over the useful region of the data section in the tape format. Seo et al is relied on the teachings of the initial region (servo burst section) (see col. 4, lines 28-52 and figure 1 of Seo et al).

It would have been obvious to one ordinary skill in the art at the time of the invention was made to the tape format with the data block format as taught by Seo et al. The rationale is as follows: one ordinary skill in the art would have been motivated to provide a proper alignment of the head and the track as suggested in col. 3, lines 10-26 of Seo et al.

Regarding claim 6: the limitations of the secondary control track or tracks is or are limited to the initial region are considered known because Pahr describes the control track signal at the beginning of the data track in col. 15, lines 46-51.

Regarding claim 7: the limitations of the data which are used for synchronization of the read unit during replay are recorded in the initial region of each data section, while useful data are recorded in the useful region of each data section are considered met because Pahr describes the noted functions in col. 20, lines 42-67.

Regarding claim 8: the limitations of the primary control track is recorded essentially centrally on the data medium are considered met because Pahr shows the noted limitations in figure 17.

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Regarding claim 9: the limitations of the two further control tracks are recorded essentially on the edges of the data medium in the initial region of each data section are known because Pahr describes a functions that are the similar noted functions in col. 16, lines 35-63.

*Claim Rejections - 35 USC § 102*

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Pahr.

Regarding claim 10: Pahr discloses a magnetic tape (see element 18 in figure 1 of Pahr) having a plurality of data tracks which are arranged parallel to one another (see figure 17 of Pahr) and are split into data sections which, for their part, are divided into an initial region (beginning of data region) and a useful region (data region), in which case at least one control track extends over the entire length of the data section (see col. 19, lines 8-16 of Pahr), characterized in that at least one additional control track is provided, which is limited to the respective initial region of each data section (The additional control track does not extend into the data region is considered inherent because the data marker does not extend into the data region - see col. 20, lines 61-67 of Pahr). Thus, the limitations of the claim are considered met.



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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Henry et al and Walker are cited for head control in a multi-parallel track tape device. Ayres et al is cited for formatting the multi-track tape.

8. Any inquiry concerning this communication should be directed to K. Wong whose telephone number is (703) 305-7772.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Hudspeth, can be reached on (703) 308-4825. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Ukw

7 Sept 01

REGINA Y. NEAL  
PRIMARY EXAMINER

*Regina Y. Neal*  
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PRIMARY EXAMINER